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BEYOND THE LOCAL REACTIONS: THE HEART UNDER ATTACK BY BEES

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INTRODUCTION

Kounis syndrome,an acute coronary syndrome induced by hypersensitivity reactions, is a recognized complication of allergic reactions globally[1-3]. We present a case of Kounis syndrome following multiple bee stings in Malaysia.

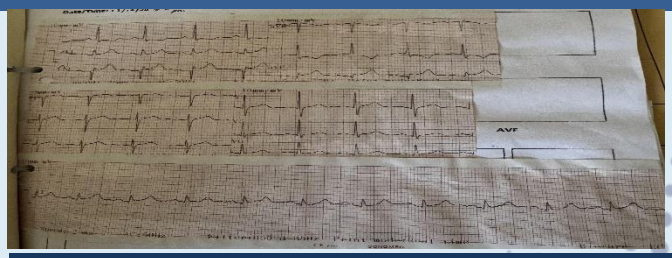

Figure 1 : ECG shows Inferior MI

CASE REPORT

A 65-year-old male with diabetes mellitus (DM) and hypertension (HPT) presented to the emergency department after being stung multiple times by bees on his upper trunk while gardening. He experienced pain and itchiness at the sting site with no other symptoms. Clinically, the patient was hypotensive (BP 80/50), heart rate of 102 bpm, bilateral rhonchi on auscultation, and an SpO2 of 96%. The patient was treated for anaphylactic shock secondary to multiple bee stings with crystalloid infusion, intramuscular (IM) adrenaline 500mcg, intravenous (IV) hydrocortisone 200mg, IV chlorpheniramine 10mg, and nebulized salbutamol. A total of approximately 400 bee stingers were removed. Subsequently, the patient's general condition improved with normalized blood pressure (BP 120/70) and resolution of tachycardia. Six hours post-admission, he developed chest pain, and an ECG revealed ST depression in leads I and aVL, along with ST elevation in lead aVF. Troponin I was elevated at 125,250. Aspirin 300mg was administered, and a cardiologist was consulted. The patient's chest pain resolved, and he was monitored in the ward and discharged after three days.

DISCUSSION

Massive Hymenoptera envenomation is defined as occurrence of more than 50 stings. The venom, trigger IgE-mediated hypersensitivity reactions, releases inflammatory mediators that can induce coronary artery vasospasm (Type 1) or plaque rupture (Type 2) in patients with pre-existing coronary artery disease, leading to acute coronary syndrome. Prompt removal of the sting using a glass slide, without squeezing the stings, is crucial to minimize toxin absorption. The decision to initiate thrombolytic or percutaneous coronary intervention (PCI) depends on clinical assessment. While steroids, antihistamines, and antiplatelet agents are potential treatments, the patient's rapid clinical improvement and early peak troponin level follow by subsequent downward trend in troponin I levels in our case obviated the need for these interventions.

CONCLUSION

Kounis syndrome related to bee stings involved early recognition, careful removal of stingers, and management of both the allergic reaction and acute coronary syndrome.

KEYWORDS

Kounis syndrome,anaphylactic shock,bee sting

REFERENCES

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Figure 2 : Bee stings was removed from patient